CHAPTER 4
SECTION 1.3

SINGLE PHOTON EMISSION COMPUTED TOMOGRAPHY (SPECT)

Issue Date: December 3, 1997
Authority: 32 CFR 199.4(b)(2)(vii) and (c)(2)(ix)

I. PROCEDURE CODES

78464, 78465, 78469, 78494, 78496, 78607

II. DESCRIPTION

Single photon emission computed tomography (SPECT) is a type of radionuclide scanning. Cross-section images (slices) are constructed by a computer from radiation detected by a gamma camera that rotates around the patient who has been injected with a radioisotopic tracer.

III. POLICY

A. Myocardial perfusion imaging utilizing SPECT is covered.

B. Brain imaging utilizing SPECT is covered for the evaluation of seizure disorders.

C. Prostatic radioimmunoscintigraphy imaging utilizing SPECT may be cost-shared for the following indications:

1. Metastatic spread of prostate cancer and for use in post-prostatectomy patients in whom there is a high suspicion of undetected cancer recurrence.

2. Newly diagnosed patients with biopsy-proven prostate cancer at high risk for spread of their disease to pelvic lymph nodes.

D. Indium-111 - for detecting the presence and location of myocardial injury in patients with suspected myocardial infarction is covered.

E. Indium-111 - labeled anti-TAG72 for tumor recurrence in colorectal and ovarian cancer is covered.

F. SPECT for other indications is covered when reliable evidence supports that the use of SPECT is safe, effective, and comparable or superior to standard care (proven).

IV. EXCLUSIONS

SPECT is considered unproven for the following:

A. Differential diagnosis of symptomatic intracranial masses.

B. Differentiation of low-grade and high-grade brain tumors.

C. Guidance of stereotactic biopsy of documented intracranial mass.

D. Differentiation of recurrent brain tumor from radionecrosis.

E. Monitoring response of treatment in patients with brain tumors.

F. The assessment of cerebrovascular disease, including ischemic disease, hemorrhagic disease, and arteriovenous malformations.

G. Bone scan for evaluation of low back pain.

H. Bone scan for lumbar metastases.

I. Brain imaging for fibromyalgia.

V. EFFECTIVE DATE

A. October 14, 1990, for myocardial perfusion imaging.

B. January 1, 1991, for brain imaging.

C. October 28, 1996, for 111ln-Capromab Pendetide, CyT 356 (ProstaScint™).

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